

PROCEEDINGS OF THE NEW YORK ENTOMOLOGICAL SOCIETY

MEETING OF APRIL 17, 1951

A regular meeting of the Society was held April 17, 1951, at the American Museum of Natural History; President Gaul in the chair. There were eleven members and two guests present.

The Field Committee announced a field trip to Alpine, New Jersey, for a Sunday in May. The June field trip will be to the home of Mr. Chris E. Olsen.

The Secretary announced that Dr. William B. Creighton, a member of the Society, had been awarded a Guggenheim Fellowship to carry out his studies on migratory ants.

Dr. Vishniac informed the Society of a new Chrysomelid beetle which has been introduced to fight the toxic Klamath weed. This represents a new introduction of a beetle to control a weed. Cattle and sheep who eat this weed become photosensitized. Dr. Spieth commented that the conservationists will not like this introduction, as it benefits the sheep grazers.

There being no further business, Dr. Vishniac introduced Dr. Sally Schrader of Columbia University who spoke on "The Cytotaxonomy of Mantids."

Dr. Schrader pointed out that the cytologist could contribute to an evolutionary significant taxonomy. The chromosomes are a valid, conservative character. For this work in cytotaxonomy, the nymphs must be collected. Dr. Schrader recounted her collecting experiences. The most interesting of these was finding a deep canyon, the tree-top fauna of which could be collected from an adjacent plateau.

There are three lines of chromosomal specialization in male meiosis:

1. Prolongation of pairing of homologous chromosomes.
2. A non-chiasmate type of bivalent.
3. The pre-metaphase stretch.

Dr. Schrader then discussed a peculiar type of compound sex chromosome which is not only cytologically but taxonomically significant. She pointed out the necessity for a revision of certain sub-families as a result of the presence or absence of this character. A discussion followed Dr. Schrader's presentation.

L. S. MARKS, *Secretary*.

MEETING OF MAY 1, 1951

A regular meeting of the Society was held May 1, 1951, at the American Museum of Natural History; President Gaul in the chair. There were 14 members and 10 guests present.

The Secretary reported on the latest correspondence concerning the Ninth International Congress of Entomology.

President Gaul announced that he had received news of the death of Dr.

William Proctor, and had appointed a Committee of Mr. Schwarz, Mr. Pallister and Mr. Marks to draw up a tribute. The tribute to Dr. William Proctor was read by Mr. Herbert F. Schwarz, and ordered incorporated into an obituary to be published in the next issue of the JOURNAL.

Dr. Vishniac wished to know whether water-striders ever go under water voluntarily. The concensus of opinion was in the negative. He then introduced the speaker of the evening, Past-President Dr. T. C. Schneirla who spoke on the Army Ant.

Dr. Schneirla reviewed the work that had been done on *Eciton hamatum* and *Eciton burckelli*. With the aid of slides and motion pictures, he then explained the development of sexual broods, colony division and mating in these ants.

L. S. MARKS, *Secretary*.

MEETING OF MAY 15, 1951

A regular meeting of the Society was held May 15, 1951, at the American Museum of Natural History; President Gaul in the chair. There were 11 members and 10 guests present. There being no formal business, President Gaul turned the meeting over to the Vice-President, Dr. Clausen. The meeting was devoted to activity reports by members of the Society and invited guests.

President Gaul showed some pictures on the anatomy of wing muscles in the hornet. Dr. Forbes mentioned his own investigation of the genitalia of the Carpenter Ant and then introduced one of his graduate students at Fordham University, Mr. John Tafuri. Mr. Tafuri, who has been working with Dr. Schneirla on problems of polymorphism in the Army Ant, explained a system where, by the use of certain anatomical features, the larval age of certain polymorphic forms could be determined. Dr. Schneirla commented on the excellence of the paper and pointed out that it represented collaboration between the Museum and the University.

Mr. Marks then reported on some details of the lepidopterous head. The morphology of the head in Lepidoptera, exclusive of the mouthparts, has been a neglected subject. The so-called transfrontal suture often reported for Lepidoptera was found to be not homologous with this suture in other orders, and several explanations of this were offered.

Mrs. Vaurie reported on her Revision of the Broad-nosed Weevils, an economically important group. The shape of the scales in this weevil was found to be a character of taxonomic importance.

Dr. Schneirla then reported on Miss C. Jackson's experiments in insect psychology. She found that in a dozen runs, ants (*Formica inorta*) would learn the shortest run.

Dr. Vishniac reported further on his polarization studies. He is now working on behavior in the water striders. Dr. Donohoe reported that the degree of infestation of the sheep tick in New Jersey was severe. There were no ticks last year. He suggested perhaps that some wild animal might act as the reservoir.

L. S. MARKS, *Secretary*.

MEETING OF OCTOBER 2, 1951

A regular meeting of the Society was held October 2, 1951, at the American Museum of Natural History; President Gaul in the chair. There were 10 members and 4 guests present.

Mr. Pohl, co-delegate of the Society to the International Congress at Amsterdam advised the Society of his inability to attend the International Congress.

Mr. Harriot reported for the Field Committee. The Field trip of May 20 was postponed until May 27. Because of the inclement weather, few members showed up and the collecting was poor. The field trip of June 10 to Mr. Chris Olsen's was attended by a number of members of the Society.

The Secretary read a letter of appeal from the Zoological Society of London, the publishers of the ZOOLOGICAL RECORD. Because of its importance, Dr. Forbes suggested that this letter be read at several subsequent meetings.

The Secretary informed the Society of the recent appointment of Dr. R. B. Swain to the Point Four program, and of the death of the English myrmecologist, Dr. Donis Thorpe. President Gaul then called on various members and guests to relate their experiences of this past summer.

Mr. Pohl visited the French Museum of Natural History. Dr. Jeannel, the director, has retired and in his place, subject to verification by the Academy of Sciences and the Ministry, Dr. Chopard has been elected. Mr. Pohl also visited with Dr. Bertrand, the expert on water beetles and with Prof. Portier of the Sorbonne. Prof. Portier has published a book on the biology of the Lepidoptera.

Mr. Harriot collected Diptera and some butterflies at Alpine, New Jersey.

Mr. Gaul found that the wing beat in Diptera was almost identical with the wing beat of the Hymenoptera which they imitate. He called this phenomenon audio-mimicry.

Mr. Roensch was stung while taking motion pictures of the ichneumon fly *Megarhyssa*.

Dr. Clausen reported on the prevalence of Tingids in the Bronx this summer.

Mrs. Vaurie spent the summer at the Lerner Marine Laboratories and collected Buprestids by day, and Longicorn beetles by night. She also bred Cerambycids in breeding cages. Mrs. Vaurie then mentioned that she had used the Berlese funnel to collect minute insects.

Mrs. Donohoe then spoke of her new interest in acarology. She has been making a survey of all the mite families.

Dr. Donohoe then explained the Berlese funnel. A discussion on the funnel followed, with Messrs. Gaul, Marks, Donohoe, Mrs. Donohoe and Dr. Clausen participating.

Dr. Donohoe told of his teaching Nature Study to children whose ages ranged from 5 to 13.

President Gaul then spoke in some detail on his wing muscle experiments.

The wing muscles do not contract as fast as the wings beat. The abdominal movements are synchronized with the contraction of the wing muscles. There are about 20 contractions a second for a wing beat of 120.

L. S. MARKS, *Secretary*.

MEETING OF OCTOBER 16, 1951

A regular meeting of the Society was held October 16, 1951, at the American Museum of Natural History; President Gaul in the chair.

The Secretary read the letter from the Zoological Society of London in reference to support of the ZOOLOGICAL RECORD and the President appointed Mr. Sam Harriot a committee of one to coordinate the raising of money for the Record.

Mrs. Vaurie called the attention of the Society to the COLEOPTERISTS BULLETIN, published by the Coleopterists Society.

The speaker of the evening, Dr. Charles Vaurie, then spoke on his collecting trip with Mrs. Vaurie in the Western United States for Cicindellidae. The trip was in the Northwestern States from Central Iowa to Wyoming, Colorado and the Canadian province of Alberta. It took about 11 weeks and they collected about 7,000 tiger beetles. Dr. Vaurie showed slides of various species, including some of the rarer color forms. The meeting adjourned at 9: 20 P.M.

L. S. MARKS, *Secretary*.

MEETING OF NOVEMBER 20, 1951

A regular meeting of the Society was held November 20, 1951, at the American Museum of Natural History; President Gaul in the chair. There were 12 members and 5 guests present.

Mr. Edgar D. Mullgrav, 3758 Tenth Avenue, New York 34, New York, was proposed for membership.

Mr. Schwarz, as delegate to the New York Academy of Science reported on the proposed change in Article 6 of the by-laws of the New York Academy of Science. The amended article would exclude the votes of the delegates of the affiliated Societies in Council. A discussion followed. The President announced he would call an Executive Committee Meeting to discuss the question of our relations with the New York Academy of Science.

President Gaul suggested a Publicity Committee and appointed Mr. Pohl to it.

The speaker of the evening was Miss Alice Gray who spoke on Wasps Nests. In reality, she said it was a preliminary survey of the nests of social Hymenoptera in the collection of the American Museum of Natural History.

By means of an ingenious pictorial key Miss Gray separated the nests into two major and several minor categories. The talk was illustrated both by Kodachromes taken by Dr. Clausen and by the actual specimens. Miss Gray pointed out the paucity of the literature on the subject.

L. S. MARKS, *Secretary*.

MEETING OF DECEMBER 4, 1951

A regular meeting of the Society was held December 4, 1951, at the American Museum of Natural History; President Gaul in the chair. There were 19 members and 27 guests present.

President Gaul appointed a Nominating Committee consisting of Dr. Cazier and Messrs. Pallister and Harriott and an Auditing Committee of Dr. Gertsch and Mr. Huntington. Mr. Edgar D. Mullgrav, 3758 Tenth Avenue, New York 34, New York, was elected to membership.

The Secretary read the recommendation of the Executive Committee that the Society elect Dr. A. Petrunkevitch to Honorary membership. Upon the motion of Dr. Spieth, Dr. Petrunkevitch was unanimously elected. The total number of Honorary members now stands at 9 out of a possible 12.

There being no other business, the Society heard Dr. Petrunkevitch speak on "Macro-evolution in Arachnida." Dr. Petrunkevitch made a careful distinction between Macro- and Micro-evolution. This concept is due to the geneticist, Goldschmidt, and has been adopted by the paleontologist, Simpson. Dr. Petrunkevitch traced the evolution of the sternal plates in Scorpions as an illustration of his thesis. He showed, furthermore, how the whip scorpions have greater claim to the title "living-fossil" than does *Limulus*, the King Crab. Then, using the weaving of spiders as an example, he tried to show evolutionary patterns in instinct. Dr. Petrunkevitch terminated his talk by calling attention to various species which in his opinion have reached their evolutionary peak.

L. S. MARKS, *Secretary*.

MEETING OF DECEMBER 18, 1951

A regular meeting of the Society was held December 18, 1951, at the American Museum of Natural History, President Gaul in the chair. There were 8 members and 3 guests present.

The Secretary called the attention of the members to the fact that Dr. Vishniac had won several prizes of the Biological Photographers Association. The matter of the New York Academy of Sciences was again discussed.

Mr. Harriot reported that he had taken in \$20.00 for the ZOOLOGICAL RECORD.

Mr. Pohl announced he had spoken to the Secretary about "The Voice of America." A letter is in preparation.

Dr. Vishniac, in a highly amusing digression, informed the members of the censorship regulations relative to the publication of certain intimate pictures of insects.

The scientific discussion of the evening was "The Orthoptera." It was led by Drs. James Forbes and John Rehn. Reminiscent of the early days of the Society, the members and guests sat about the speakers' table. As the discussion progressed, specimens and books were passed back and forth. Dr. Forbes presented the traditional viewpoint in Orthopteran Taxonomy. Dr. Rehn, in turn, presented some of the newer concepts. The members and guests agreed that it was a most interesting and informative meeting.

L. S. MARKS, *Secretary*.